Application No. 09/345,669 Amendment dated September 16, 2003 Reply to Office Action of September 2, 2003

REMARKS

§ 102 Rejection Based on Kameyama:

Independent claim 1 was rejected as being anticipated by Kameyama. Kameyama fails to teach or suggest determining the number of defective elements by analyzing the data during the frame read out, as set forth in claim 1.

In Kameyama, defective pixels are detected but they are not counted. They are not counted because the purpose of detecting the defective pixels is to attempt to correct for them. For example, in the material cited in col. 2, lines 3-16, it is explained that "A defective CCD pixel is detected as follows...". Plainly, what is being described is how to detect a defective pixel, not how to determine the number of defective pixels. In lines 17-21, it is explained that after a defective CCD pixel is detected, it is corrected. Likewise, in col. 6, in the material cited by the Examiner, it is explained that a detecting circuit detects defects but the address data for the defective pixel is merely stored. When the video camera is shipped to the user, data relative to defective CCD pixels are stored in the memory 13. See column 6, lines 25-27. Thus, Kameyama makes it reasonably clear that he is interested in identifying the defective pixels and then storing their addresses or correcting these defects. There is nothing to suggest that "the number of defective elements" is determined "by analyzing data during the frame read out." Therefore, reconsideration of the rejection of claim 1 is respectfully requested.

Independent claim 15 calls for instructions that cause a processor-based system to determine during the read out of pixel intensity values from the array, the number of defective pixels by analyzing pixel data from the imaging array in view of the high and low limits for pixel intensity values. Claim 15 also distinguishes over Kameyama for reasons similar to those set forth above with respect to independent claim 1.

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Independent claim 22 calls for a circuit in the sensing device adapted to determine the number of defective elements by analyzing the element data as it is read out from the elements. Claim 22 also distinguishes over Kameyama for reasons similar to those set forth above with respect to independent claim 1.

§ 102 Rejection Based on Vincent:

Independent claim 1 was rejected as being anticipated by Vincent. Vincent fails to teach determining the number of defective elements by analyzing said data during the frame read out, as set forth in claim 1.

Vincent describes performing a sequence of read operations from an external memory to obtain the location of defective pixels so that they can be concealed. Vincent, col. 8, lines 23-41.

In other words, Vincent obtains the information about the defective pixels not from the frame during the frame read out but rather from an external memory. Therefore, Vincent cannot anticipate claim 1. For the same reasons, claims 15, 22 and all the dependent claims distinguish over the art of record.

§ 102 Rejection Based on Heller:

Independent claim 22 was rejected as being anticipated by Heller. Heller fails to teach or suggest a circuit in the sensing device adapted to determine the number of defective elements by analyzing the element data as it is read out from the elements, as set forth in claim 22.

In Heller, the integrated circuit imaging device is operated to program and store defective pixel location information for the sensor array. Heller, col. 8, lines 21-22. Heller does not determine the number of defective elements by analyzing the element data as it is read out from the elements.

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§ 103 Rejection of Claim 15:

Independent claim 15 was rejected as being obvious over Vincent in view of Kameyama. Since claim 14 was rejected as anticipated by each of Kameyama and Vincent it is assumed that this rejection is the result of a typographical error.

Formal Objections:

The Examiner objected to the drawings as not showing an external tester. However, an external tester is no longer claimed.

Claim 5 was rejected as failing to comply with the enablement requirement. The Applicant has amended claim 5 accordingly.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested.

Respectfully submitted,

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